

**Amendments To Claims**

This listing of claims will replace all prior versions and listing of claims in the application.

1. (Currently Amended) An apparatus adapted to dispense a web of sheet material from a continuous roll, the apparatus comprising:

a support configured to rotatably support a roll of sheet material which includes identification relating to a-type absorbent characteristics of sheet material on a-the roll;  
an identifier configured to identify the type absorbent characteristics of sheet material on the roll from the identification;  
a processor configured to receive data relating to the type absorbent characteristics of the sheet material on the roll, the processor further configured to process the data and generate an output command; and  
a controller configured to control the length of sheet material dispensed from the roll in response to the output command.

2. (Original) The apparatus of claim 1, wherein the identifier comprises a reader for reading data from identification on the roll of sheet material.

3. (Currently Amended) The apparatus of claim 2, wherein the reader is designed configured to read data from a label, a logo, a bar code, a magnetic strip, an RFID tag, or a hologram on the roll of sheet material.

4. (Original) The apparatus of claim 2, wherein the reader is arranged to read data from identification on a core of the roll of sheet material.
5. (Currently Amended) The apparatus of claim 2, wherein the read-reader is arranged to read data from identification on the sheet material.
6. (Original) The apparatus of claim 2, wherein the identification on the roll of sheet material is encoded, and the apparatus includes a decoder for decoding the encoded data.
7. (Original) The apparatus of claim 2, wherein the reader is positioned inside of the dispenser.
8. (Original) The apparatus of claim 2, wherein the reader is positioned adjacent the dispenser.
9. (Original) The apparatus of claim 3, wherein the reader is arranged to read data from an RFID tag embedded in or attached to a core of the roll of sheet material.
10. (Original) The apparatus of claim 1, including an infrared emitter/detector circuit which is arranged to emit infrared light into a core of the roll of sheet material, and to detect reflection of the light off reflective identification on a core of the roll.

11. (Original) The apparatus of claim 10, wherein the reflective identification is configured such that the reflectivity is controlled, therefore permitting control of total reflected light.
12. (Cancelled).
13. (Canceled).
14. (Currently Amended) The apparatus of claim 1, wherein the processor includes an algorithm stored in a chip set embedded on a printed circuit board.
15. (Original) The apparatus of claim 1, wherein the processor is arranged to receive data from the identifier, to process the data, to generate an output command, and to transmit the output command to the controller.
16. (Original) The apparatus of claim 1, wherein the support is contained within a dispenser housing.
17. (Currently Amended) The apparatus of claim-14\_16, wherein an activation switch is provided for activating the identifier when the dispenser housing is opened, thereby to allow identification of a roll of sheet material inserted onto the support.

18. (Original) The apparatus of claim 15, wherein a deactivation switch is provided for deactivating the identifier after identification of the sheet material on the roll.
19. (Original) The apparatus of claim 16, including a delay switch for providing a delay between successive dispensing operations.
20. (Original) The apparatus of claim 17, including a lockout switch for preventing operation of the controller when the dispenser housing is open.
21. (Original) The apparatus of claim 1, including an electric motor for automatically dispensing the sheet material.
22. (Original) The apparatus of claim 19, wherein the controller controls the number of revolutions of the electric motor in response to the output command.
23. (Original) The apparatus of claim 19, wherein an external sensor is provided for sensing a user's hand, and the electric motor is activated so as to dispense sheet material in response to the sensing of the user's hand.
24. (Canceled).

25. (Currently Amended) A dispenser for dispensing sheet material from a supply roll including identification relating to the type absorbent characteristics of sheet material on the roll, the dispenser comprising:

a dispenser housing;

a support for rotatably supporting the supply roll within the dispenser housing;

an identifier on or adjacent the support for identifying the type absorbent characteristics of sheet material on the roll from the identification;

a processor for receiving identification data from the identifier, processing the data and generating an output command; and

a controller for controlling the length of sheet materials dispensed from the supply roll in response to the output command.

26. (Currently Amended) A method of dispensing a web of sheet material from a continuous roll, the method comprising:

providing a roll of sheet material which includes identification relating to a type absorbent characteristics of sheet material on the roll;

rotatably supporting the roll of sheet material adjacent an identifier in a dispenser housing;

identifying the type absorbent characteristics of sheet material on the roll;

processing data relating to the type absorbent characteristics of sheet material on the roll to generate an output command; and

controlling a length of sheet material dispensed from the roll in response to the output command.

27. (Currently Amended) The method of claim ~~24~~26, wherein the identifier comprises a reader, and the step of identifying the type-absorbent characteristics of sheet material on the roll comprises reading data from identification on the roll of sheet material.
28. (Currently Amended) The method of claim ~~25~~27, wherein the step of reading data comprises reading data from a label, a logo, a bar code, a magnetic strip, a RFID, or a hologram on the roll of sheet material.
29. (Currently Amended) The method of claim ~~25~~27, wherein the step of reading data comprises reading data from identification on a core of the roll of sheet material.
30. (Currently Amended) The method of claim ~~25~~27, wherein the step of reading data comprises reading data from identification on the sheet material.
31. (Currently Amended) The method of claim ~~25~~27, wherein the step of identifying the type-absorbent characteristics of sheet material on the roll includes decoding encoded identification on the roll of sheet material.

32. (Original) The method of claim 27, wherein the step of reading data comprises reading data from an RFID tag embedded in or attached to the core of the roll of sheet material.
33. (Currently Amended) The method of claim ~~25~~26, wherein the step of identifying the type absorbent characteristics of sheet material on the roll comprises emitting infrared light into the core of the sheet material roll, and detecting reflection of the light off reflective identification on the core of the roll.
34. (Currently Amended) The method of claim ~~24~~26, including the step of activating the identifier when the dispenser housing is opened so as to allow for identification of the type absorbent characteristics of sheet material on a roll inserted onto the support.
35. (Currently Amended) The method of claim ~~32~~34, including the step of deactivating the identifier after identification of the sheet material on the roll.
36. (Currently Amended) The method of claim ~~24~~26, including the step of providing a delay between successive dispensing operations.
37. (Currently Amended) The method of claim ~~24~~26, including the step of dispensing the length of sheet material with an electric motor.

38. (Currently Amended) The method of claim-35~~26~~, including the step of dispensing the length of sheet material in response to sensing a user's hand adjacent the dispenser housing.

39. (Currently Amended) A roll of sheet material for use in the method of claim-23~~26~~, the roll including identification which is identifiable by the identifier so as to allow for the controlled dispensing of sheet materials from the roll.

40. (Currently Amended) An apparatus for dispensing a web of sheet material from a continuous roll, the apparatus comprising:  
a support for rotatably supporting a roll of sheet material which includes identification relating to ~~the type-absorbent characteristics~~ of sheet material on the roll;  
~~a microcontroller for controlling the length of sheet material dispensed from the roll;~~  
a first network operating in accordance with a predetermined protocol;  
a second network comprising a plurality of ~~said~~ microcontrollers;  
a gateway operatively coupled to said first network and to said second network;  
and  
an HTTP server embedded in one of said gateway and said plurality microcontrollers.